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Vector contg. solid hydrophilic core and grafted lipid layer - for transport of cellular mediators such as interleukin 2, with increased

activity and prolonged period of action

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Inventor: CASTIGNOLLES N; PERRIN P; SAMAIN D Number of Countries: 021 Number of Patents: 007

Patent Family:

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Pat	ent No	Kind	Date	App	plicat No	Kind	Date	Week	
WO	9423701	<b>A</b> 1	19941027	WO	94FR452	Α	19940421	199442	В
FR	2704145	<b>A</b> 1	19941028	FR	934698	Α	19930421	199443	
EΡ	696191	A1	19960214	ΕP	94913676	Α	19940421	199611	
				WO	94FR452	Α	19940421		
JΡ	8508990	W	19960924	JP	94522854	Α	19940421	199704	
				WO	94FR452	A	19940421		
EΡ	696191	B1	19970122	ΕP	94913676	Α	19940421	199709	
				WO	94FR452	Α	19940421		
DE	69401581	E	19970306	DE	601581	Α	19940421	199715	
				ΕP	94913676	Α	19940421		
				WO	94FR452	Α	19940421		
US	5891475	Α	19990406	WO	94FR452	Α	19940421	199921	
				US	96537790	Α	19960131		

Priority Applications (No Type Date): FR 934698 A 19930421

Cited Patents: EP 344040; WO 9009798; WO 9221329

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

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Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

FR 2704145 A1 38 A61K-009/127

EP 696191 A1 F A61K-009/16 Based on patent WO 9423701 Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

JP 8508990 W 41 A61K-009/50 Based on patent WO 9423701

EP 696191 B1 F 31 A61K-009/16 Based on patent WO 9423701

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DE 69401581 E A61K-009/16 Based on patent EP 696191

Based on patent WO 9423701 US 5891475 A A61K-009/16 Based on patent WO 9423701

Abstract (Basic): WO 9423701 A

A particulate vector comprising (from the inside to the outside) a non-liq. hydrophilic core and an external layer of lipids (I), grafted onto the core by covalent bonds. Also claimed is a method of amplifying the activity of a polypeptide cellular mediator (CM), which is at least partially hydrophobic, comprising: (i) the prepn. of a particulate vector which has a core consisting of a matrix of natural poly- or oligosaccharides, which may be chemically cross-linked and an outer layer of natural fatty acids of variable thickness grafted by covalent bonds onto the core; (ii) opt. lyophilising the vector in a hydrophilic

environment; and (iii) combined with the CM by, at least partly, hydrophobic interactions.

USE - The vectors are used to transport and present polypeptide CMs having at least partial hydrophobic character, partic. interleukin-2 for regulating immune system function (e.g. to increase the effect of viral or bacterial vaccines) but also IL-1 to protect myeloid cells, haematopoietic growth factors for treatment of leukopaenia, interferon to control allergy, etc. The vectors can also be used for supplementation of cell cultures for in vitro protein prodn.

ADVANTAGE - When associated with the vectors, CMs have greater activity (allowing a redn. in dose and thus side-effects) and also duration of action is increased. The vectors have a very simple structure.

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Abstract (Equivalent): EP 696191 B

Particulate vector, characterised in that it comprises, from the inside to the outside, - a non-liquid hydrophilic core, - an external layer consisting of lipid compounds, grafted on the core by covalent bonds.

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Title Terms: VECTOR; CONTAIN; SOLID; HYDROPHILIC; CORE; GRAFT; LIPID; LAYER; TRANSPORT; CELLULAR; MEDIATOR; INTERLEUKIN; INCREASE; ACTIVE; PROLONG; PERIOD; ACTION

Derwent Class: B04; B07

International Patent Class (Main): A61K-009/127; A61K-009/16; A61K-009/50

International Patent Class (Additional): A61K-009/19; A61K-037/02;

A61K-047/48; A61K-048/00

File Segment: CPI

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B05-B01M; B07-A03; B14-F03; B14-G02A; B14-G03

Chemical Fragment Codes (M1):

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